DERWENT-ACC-NO: 2003-031560

DERWENT-WEEK: 200303

TITLE: Injection molding machine with programmable electronic system for monitoring and control, is operated through bidirectional real-time **wireless** interface

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PRIORITY-DATA: 2001AT-0000439 (March 20, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 20204359 U1	June 6, 2002	N/A	017	**B29C 045/76**

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
DE 20204359U1	N/A	2002DE-2004359	March 19, 2002

INT-CL (IPC): B22D017/32, **B29C045/76** , G05B019/05 , G08C017/02

ABSTRACTED-PUB-NO: DE 20204359U

BASIC-ABSTRACT:

NOVELTY - The arrangement includes a bidirectional real-time **wireless** interface
(1) for data transfer from or to an external, preferably portable data processing unit (18).

DETAILED DESCRIPTION - Preferred features: The interface communicates directly with the external computer, without using other data transmission units. It is infra red, preferably according with the IrDA standard. It alternatively comprises radio equipment transmitting electromagnetic signals. The computer

includes one or more of a transceiver, microprocessor, memory and mains-independent battery and/or is portable. The computer has an operational interface comprising e.g. a keyboard and/or touchpad and/or display and/or touch screen. A printer is employed. Data is exchanged in real time. Automatic recognition and/or contact is executed, when the computer enters the communication range of the **wireless** interface. Before exchanging data, there is an authentication check. Data is transmitted between the internal machine control system (16) and the computer, and commands are transmitted through it to the machine (14). Servicing is carried out via the interface. Software, especially control programs, are exchanged through the interface which can be used to check the program version. Data and/or commands are exchanged, the external computer function being performed by a mobile telephone, operating through a mobile telephone network, preferably in real time.

USE - An arrangement for data exchange between a computer or mobile phone and an injection molding machine. Data includes authentication checks, commands, programs and servicing information.

ADVANTAGE - The method avoids the costs and complication of cabling between the machine(s) and a separate PES-based control system. Control and data transfer can be carried out conveniently and flexibly near the machines, e.g. in the same factory building. Various types of data processor can be used, e.g. a suitably-equipped laptop computer, PDA, palm top or a mobile phone.

DESCRIPTION OF DRAWING(S) - A block diagram illustrates the interface between a laptop computer and the machine.

interface 1

transceiver 3

hard drive 13

injection molding machine 14

internal machine control system 16

mobile data processing unit 18

CHOSEN-DRAWING: Dwg.1/2

TITLE-TERMS: INJECTION MOULD MACHINE PROGRAM ELECTRONIC SYSTEM MONITOR CONTROL
OPERATE THROUGH BIDIRECTIONAL REAL TIME **WIRELESS** INTERFACE

DERWENT-CLASS: A32 P53 T01 T06 W05

CPI-CODES: A09-D01; A11-B12C;

EPI-CODES: T01-C03C; T01-M06A1A; T01-N01D; T06-A04B1; W05-D06A3; W05-D06G5;
W05-D08C;

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018 ; P0000
Polymer Index [1.2]
018 ; ND05 ; N9999 N6484*R N6440 ; J9999 J2915*R ; N9999 N6622 N6611
; K9416

SECONDARY-ACC-NO:
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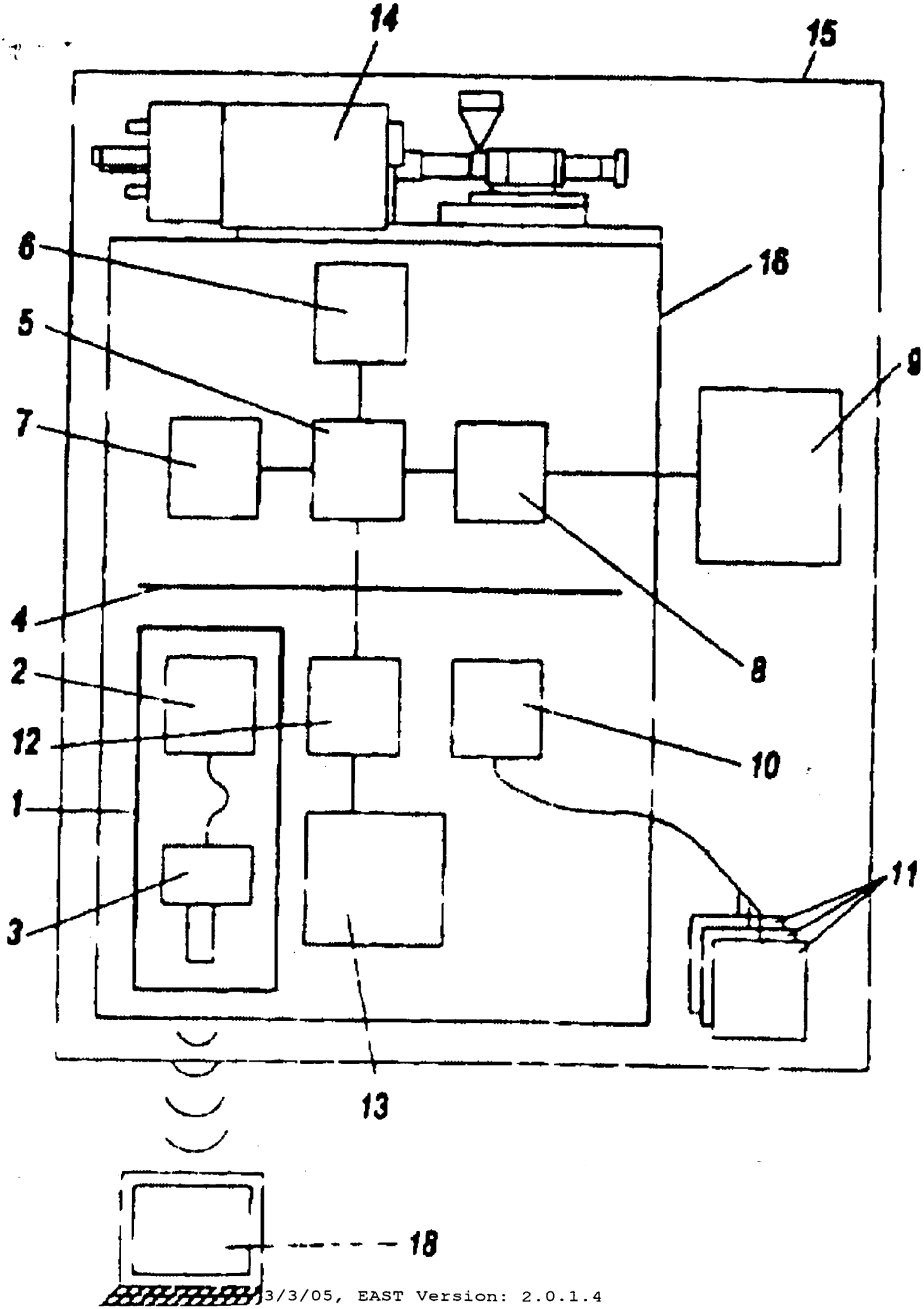
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